SECOR

SECOR
INTERNATIONAL
INCORPORATED

www.secor.com
2655 Camino Del Rio N. Suite 302
San Diego, CA 92108
619-296-6195 TEL
619-296-6199 FAX

May 20, 2005

Project No.: 08BP.01790.05

Mr. Danny Martinez
County of San Diego
Department of Environmental Health
Site Assessment and Mitigation Program
P. O. Box 129261
San Diego, CA 92112-9261

Subject: **Evaluation of Off-Site Private Well**
ARCO Facility #1790
6110 Mission Gorge Rd
San Diego, California 92120
SAM Case No. H05115-001

Dear Mr. Martinez:

SECOR International Incorporated (SECOR), on behalf of Atlantic Richfield Company, is pleased to provide this letter summarizing our evaluation of possible impact to a reported off-site private well (Figure 1 and 2) from the subject ARCO facility. This evaluation was requested by the County of San Diego, Department of Environmental Health, Site Assessment and Mitigation Program (SAM) dated February 24, 2005 (via e-mail). Based on the evaluation summarized herein, SECOR recommends the SAM consider "no further action" status for this site.

PRIVATE WELL INFORMATION

The SAM indicated that a private supply well is located approximately 950 feet down gradient of the subject site, at 4341 Twain Avenue (see Figure 1 and Assessor's Parcel Maps). The following information was provided by the SAM:

Supply Wells - Rec# 1 of 1

Permit	W30550
Name	SECURED CAPITAL
APN	4611700600
Address	4341 TWAIN AVE
City	SAN DIEGO
Well Type	INDUSTRIAL
Permit Type	NEW WELL
Approved	09/08/1999

On March 1, 2005, SECOR personnel visited the site; however, they were unable to locate the well from public right-of-way vantage points. On March 1, 2005, SECOR personnel contacted the well owner representative, Mr. Dan Smith of Secured Capital, who confirmed the presence of the well and that it had been installed within the past year. Mr. Smith said that the well has never been used. He said the well water had not been tested for the presence of dissolved hydrocarbons, and there are not plans to conduct testing. He indicated that the well is planned

to be used for irrigating the business park property for landscaping purposes, and that the groundwater is not planned to be used for drinking water.

Mr. Smith indicated that the well was approximately 60 feet deep. SECOR personnel requested copies of well records that might indicate the well's exact location and construction; however, such records have not been received from the well owner as of the date of this letter.

SUMMARY OF ESTIMATED TIME-FRAME TO REACH MCLS

As shown on Figure 3, the groundwater flow direction is generally toward the west, hence, the 4341 Twain Avenue property is crossgradient of the site. As shown on Figure 4, the estimated extent of dissolved benzene and methyl tertiary-butyl ether (MTBE) is limited to approximately 60 feet of the site, based on the most recent groundwater sample analytical results (December 14, 2004). Based on the December 2004 sampling event, dissolved benzene concentrations were not detected in the off-site wells, except for well MW-11. Dissolve MTBE concentrations were generally below the State of California maximum contaminant level (MCL) of 13 µg/L in samples collected from wells associated with the site. Although not detected, it is possible that MTBE remains above the MCL in groundwater near monitoring well MW-8, which had a laboratory reporting limit for MTBE of 25 µg/L for the sample collected from that well. Based on the Corrective Action Plan Addendum No. 1, prepare by SECOR, dated May 25, 2004, the data trends indicate that benzene and MTBE concentrations will reach MCLs in less than five years by remediation by natural attenuation (RNA).

CONCLUSIONS AND RECOMMENDATIONS

Sufficient data has been gathered to demonstrate that RNA will achieve groundwater cleanup goals within a reasonable time-frame (approximately five years). Based on recent analytical results, MTBE concentrations may have already decreased to levels below MCLs in wells associated with the site. SECOR concludes that based on the distance from the site and the estimated natural attenuation rate for constituents of concern, it is unlikely that the private well will be impacted by historical petroleum hydrocarbons from the subject site.

As such, SECOR recommends that the SAM consider "no further action" status for this site. We appreciate the opportunity to provide this evaluation to the SAM, and hope that this letter provides the required information. If you have any questions or comments, please contact the undersigned at (619) 296-6195.

Sincerely,

SECOR International Incorporated

REGISTERED GEOLOGIST
BRADLEY G. EISENBERG
No. 6872
EXP 11/05
STATE OF CALIFORNIA

Bradley G. Eisenberg, RG #6872
Senior Geologist

Marci Richards
Principal Geologist

Justin L. Hawkins, PE
Principal Engineer

cc: Roy Thun, Atlantic Richfield

Attachments: References
Figure 1 – Site Location Map
Figure 2 – Site and Vicinity Plan
Figure 3 – Groundwater Gradient Map, December 14, 2004
Figure 4 – Benzene and MTBE Isoconcentration Map, December 14, 2004
Assessor's Parcel Maps

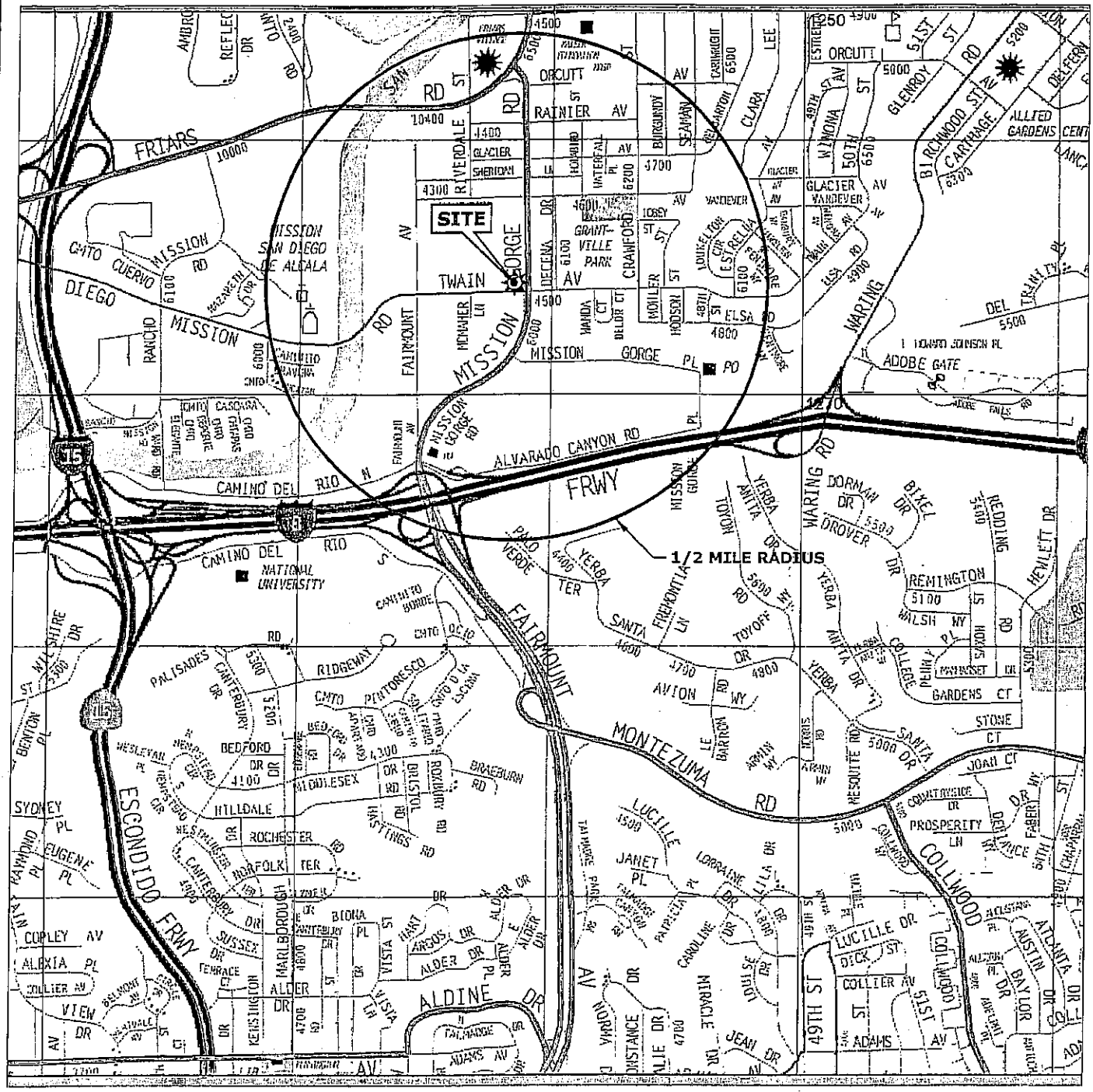
REFERENCES

Fetter, C.W., 1988, Applied Hydrogeology, 2nd Edition, Merrill Publishing Company, pp. 80.

SECOR International Incorporated, 1996, Corrective Action Plan and Community Health and Safety Plan, ARCO Facility ARCO Facility #1790, 6110 Mission Gorge Road, San Diego, California, 92120, Unauthorized Release #H05115-001, dated April 8.

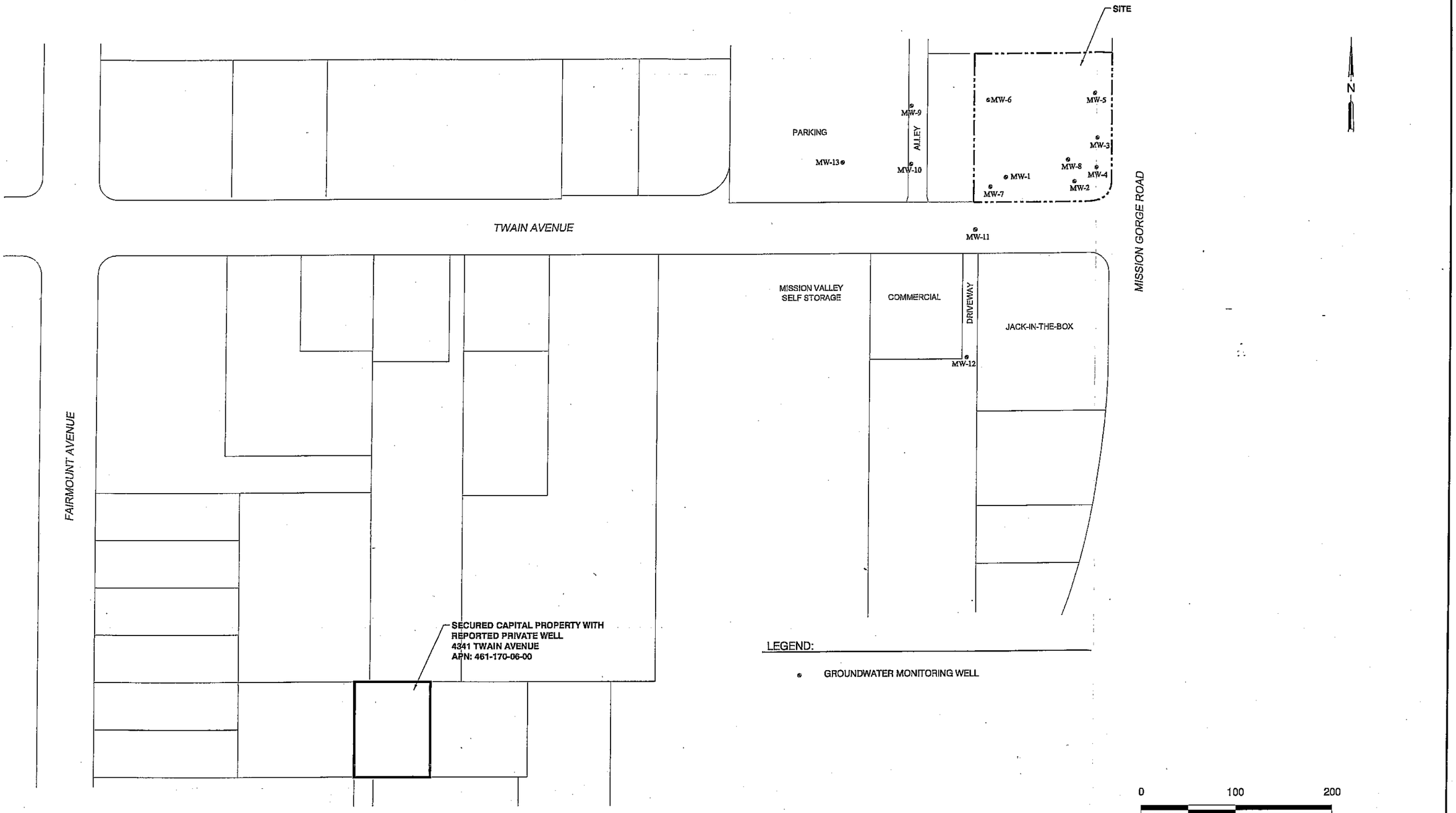
-, 2004, Addendum No. 1 to Corrective Action Plan Dated April 8, 1996, ARCO Facility No. 1790, 6110 Mission Gorge Road, San Diego, California, 92120, dated January 14.

-, 2005, Quarterly Groundwater Remediation Status Report for the Fourth Quarter 2004, ARCO Facility No. 1790, 6110 Mission Gorge Road, San Diego, California, 92120, dated January 14.



REFERENCE: THOMAS GUIDE CD-ROM, PAGE & GRID 1249 H7.

DRAWN BY: PD CHECKED: APPROVED: DATE: 2/26/04 JOB No.: 08BP.01790.03 CAD FILE: 1790SLOC	PREPARED BY: SECOR 2655 Camino del Rio North, Suite 302 San Diego, California	PREPARED FOR: ARCO FACILITY #1790 6110 MISSION GORGE ROAD SAN DIEGO, CALIFORNIA	FIGURE 1 **SITE LOCATION MAP**	



ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE

SECOR
2655 CAMINO DEL RIO NORTH, SUITE 302
SAN DIEGO, CALIFORNIA
PHONE: (619) 296-6195/296-6199 (FAX)

PREPARED FOR:
ARCO FACILITY #1790
6110 Mission Gorge Road
San Diego, California

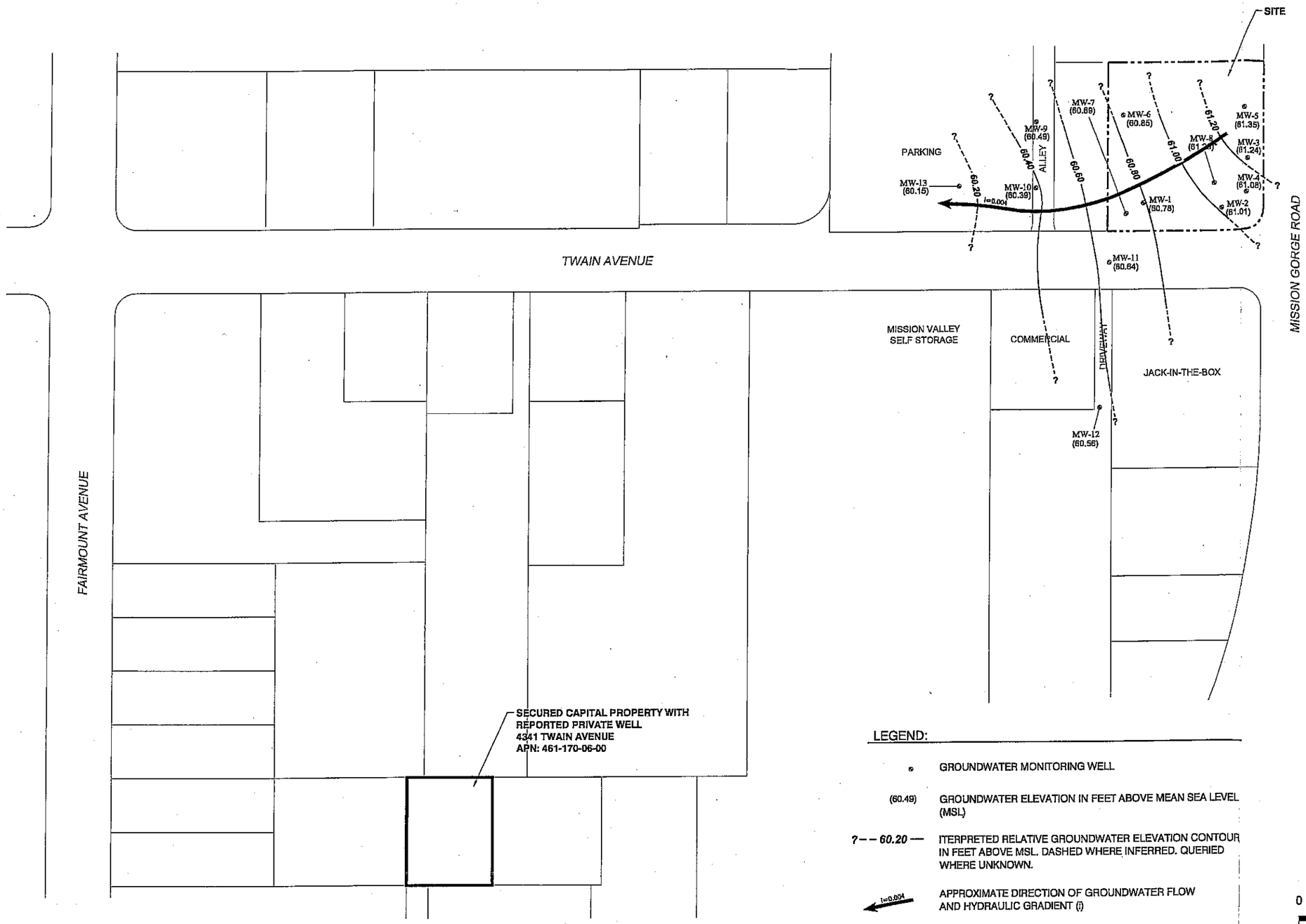
SITE AND VICINITY PLAN

FIGURE: 2

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
08BP.01790.07	RO	MG		5/18/05

FILEPATH:P:\CAD\Allprojects2005dwgs\Arco 2005\1790-2K5\1790SVM5-05.dwg|Rocampo|May 18, 2005 at 15:26|Layout: SVM

1790SVM5-05



LEGEND:

⊙	GROUNDWATER MONITORING WELL
(60.49)	GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (MSL)
?– – 60.20 —	ITERPRETED RELATIVE GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MSL. DASHED WHERE INFERRED. QUERIED WHERE UNKNOWN.
i=0.004	APPROXIMATE DIRECTION OF GROUNDWATER FLOW AND HYDRAULIC GRADIENT (i)
*	DATA NOT USED IN CONTOURING

0 100 200

APPROXIMATE SCALE (FEET)

ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE

SECOR
2655 CAMINO DEL RIO NORTH, SUITE 302
SAN DIEGO, CALIFORNIA
PHONE: (619) 296-6195/296-6199 (FAX)

PREPARED FOR:
ARCO FACILITY #1790
6110 Mission Gorge Road
San Diego, California

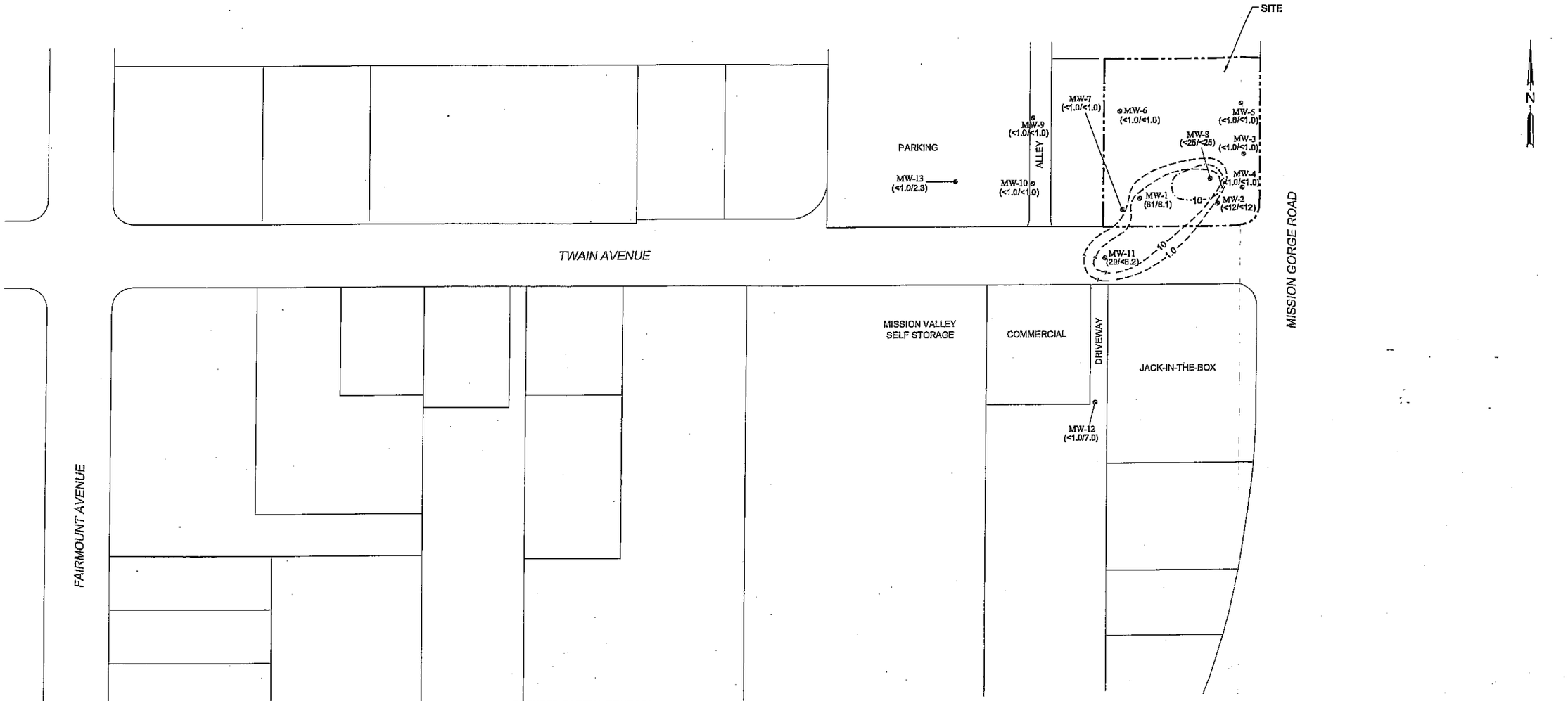
GROUNDWATER GRADIENT MAP
DECEMBER 14, 2004

FIGURE: 3

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
08BP.01790.07	RO	MG		5/18/05

FILEPATH:P:\CAD\Allprojects2005dwgs\Arco 2005\1790-2KS\1790SVM5-05.dwg|Rocampo|May 18, 2005 at 15:26|Layout: GW12-04

1790SVM5-05



LEGEND:

- ⊙ GROUNDWATER MONITORING WELL
- (<0.50/<1.0) BENZENE AND METHYL-TERT-BUTYL ETHER (MTBE) CONCENTRATIONS REPORTED IN MICROGRAMS PER LITER (µg/L).
- < BELOW LABORATORY DETECTION LIMIT SHOWN.
- ? —1.0— ESTIMATED BENZENE ISOCONCENTRATION CONTOURS IN (µg/L). QUERIED WHERE UNKNOWN.
- ? —10— ESTIMATED MTBE ISOCONCENTRATION CONTOURS IN (µg/L). QUERIED WHERE UNKNOWN.

0 100 200

APPROXIMATE SCALE (FEET)

ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE

SECOR
2655 CAMINO DEL RIO NORTH, SUITE 302
SAN DIEGO, CALIFORNIA
PHONE: (619) 296-6195/296-6199 (FAX)

PREPARED FOR:
ARCO FACILITY #1790
6110 Mission Gorge Road
San Diego, California

BENZENE AND MTBE ISOCONCENTRATION MAP
DECEMBER 14, 2004

FIGURE: 4

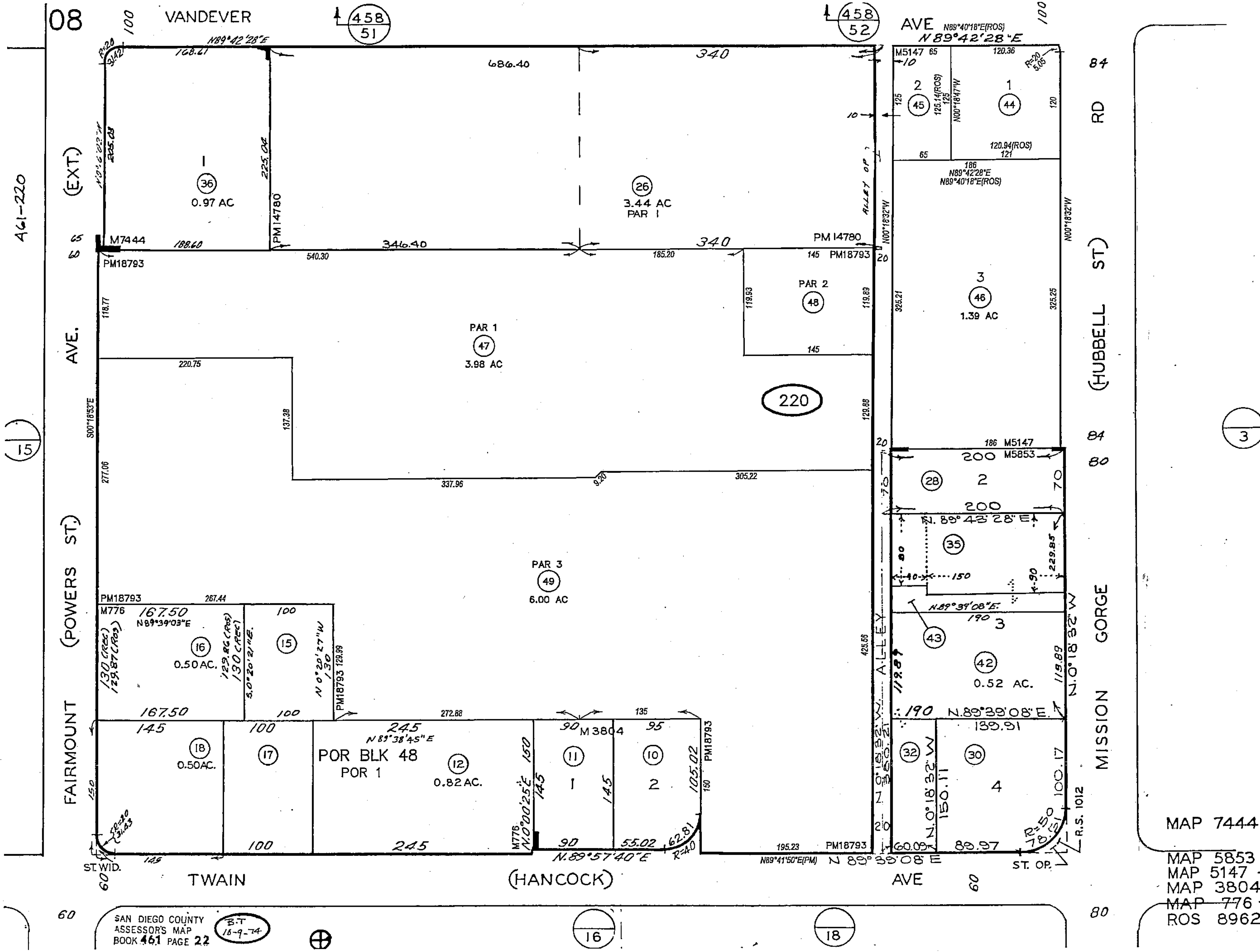
JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
08BP.01790.07	RO	MG		5/18/05

FILEPATH:P:\CAD\Allprojects2005dwgs\Arco 2005\1790-2K5\1790SVM5-05.dwg | Rocampo | May 18, 2005 at 15:26 | Layout: ISO12-04

1790SVM5-05

461-22

1"=100'



11/2/2001 SM

CHANGES				
BLK	OLD	NEW	YR	CUT
	19	36	73	216
	27	37-40	75	2443
	37-40	41	75	2860
	34	42&43	76	2731 CC
	18	SAME EWID	81	4557
	-560- 01,02&03	44-46	02	10040
	13,14,25, 41 & -560-04	47-49	02	1656

MAP 7444 - CEE GEE PARK UNIT NO. 1
MAP 5853 - MISSION OFFICE PARK
MAP 5147 - PADRE CENTER
MAP 3804 - CARTY SUB
~~MAP 776~~ - GRANTVILLE
ROS 8962, 10355 12063

461-16

1" = 100'

N

10-2-87 JK

CHANGES				
BLK	OLD	NEW	YR	CUT
USE	PAR.	23 Next		
	1	Ac CHG	76	5773

22

TWAIN (HANCOCK) AVE.

R.S. 1128

S. 89°43'45"E. 589 — 733.42 TO NE COR OF LOT 3 — 831.65 TO NE COR OF LOT 3

ST OR

AVE. (EXT)

FAIRMOUNT (POWERS ST)

BLK 47

1. 0.92 AC
6. 0.58 AC.
2. 3. 0.72 AC.
4.
5.
7.
8.
9. 0.80 AC.
10.
15.
20. 1.59 AC.

LOT 4
LOT 3
POR.

R.S. 1567

N. 89°43'45"E. 86

N. 89°39'08"E. 80

S. 89°44'15"W. 540 (N 89°40'45"E. 540 Rec.)

15 18 17 19

B.T. 10-9-74

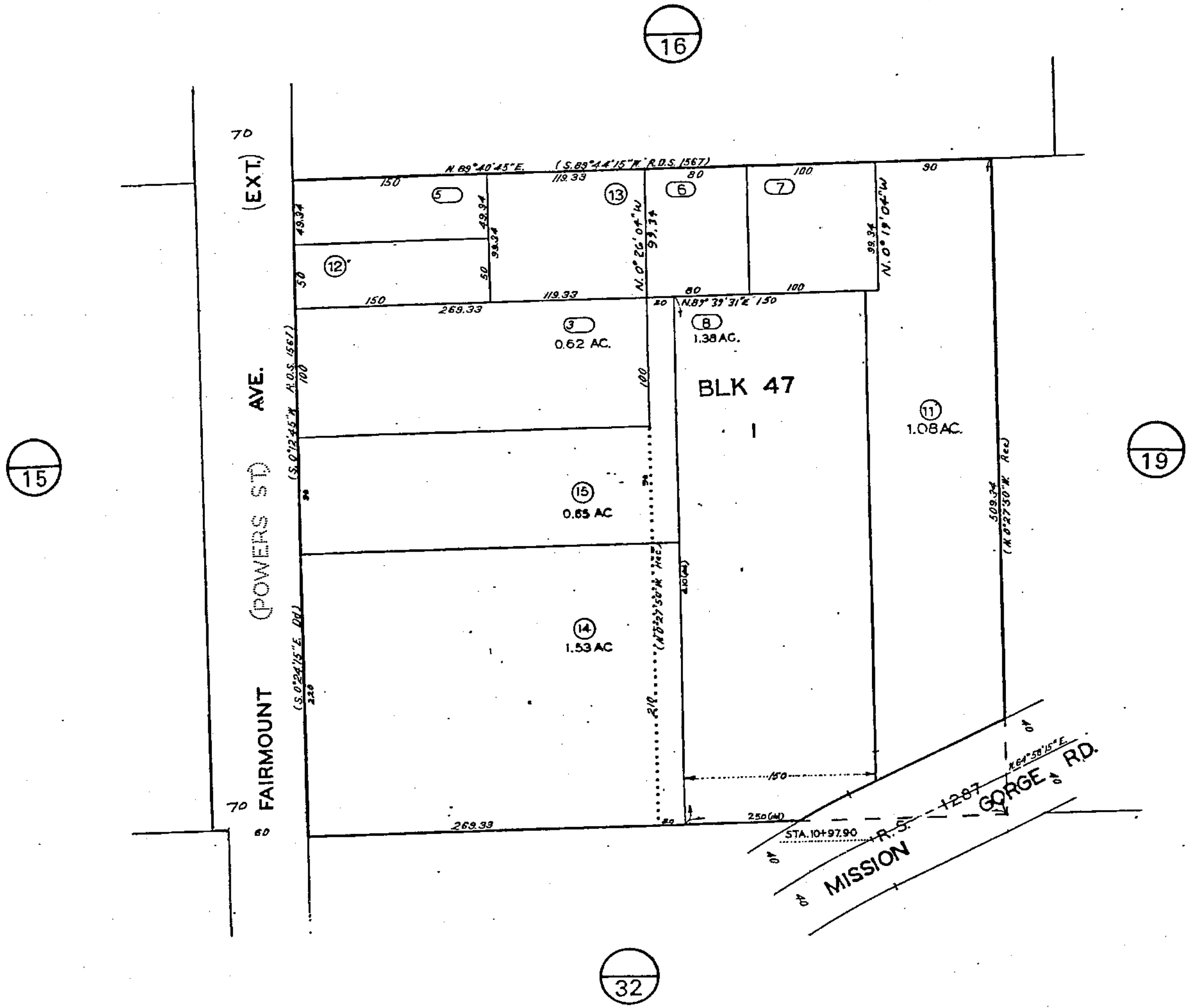
SAN DIEGO COUNTY
ASSESSOR'S MAP

MAP 770 — GRANTVILLE

461-17

1" = 100'

N



1-31-75 AW

CHANGES

BLK	OLD	NEW	YR	CUT
	12,10	14-15	68	5310

B.T. 10-9-74

SAN DIEGO COUNTY ASSESSOR'S MAP